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SELECTED ACQUISITION REPORT (RCS:DD-COMP(O&A)823)

PROGRAM: FMTV

AS OF DATE: September 30, 1994

AD-A286 335



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DIRECTORATE FOR FREEDOM OF INFORMATION  
AND SECURITY REVIEW (OASD-PA)  
DEPARTMENT OF DEFENSE

1. Designation and Nomenclature (Preferred Name):  
Family of Medium Tactical Vehicles (FMTV)

2. DoD Component: Army

3. Responsible Office and Telephone Number:

U.S. Army, Program Executive Office, COL MICHAEL W. BOUDREAU  
Tactical Wheeled Vehicles Assigned: April 1, 1992  
ATTN: SFAE-TWV-FMTV (COL Boudreau) AV 786-8665 COMM (313) 574-8665  
Warren, MI 48397-5000

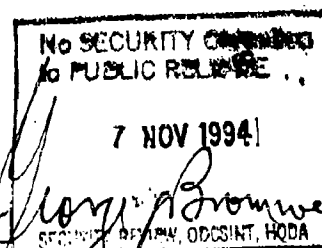
4. Program Elements/Procurement Line Items:

RDT&E:

PE 64604 Project DH07

PROCUREMENT:

APPN 2035 ICN D15500 (Army)  
APPN 2035 ICN DY0010 (Army)  
APPN 2035 ICN DV0310 (Army)  
APPN 2035 ICN DV0320 (Army)



5. Related Programs: None.

6. Mission and Description:

The Family of Medium Tactical Vehicles (FMTV) Non-Developmental Item (NDI) program consists of a 2 1/2 ton Light Medium Tactical Vehicle (LMTV), all wheel drive 4x4 in van and cargo body styles and a 5 ton Medium Tactical Vehicle (MTV), all wheel drive 6x6 in fourteen (14)

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## 6. Mission and Description (Cont'd):

body styles (cargo, cargo w/Materiel Handling Equipment (MHE), long wheel base (lwb) cargo, lwb cargo w/MHE, tractor, dump, wrecker, expansible van and fuel tanker). Low Velocity Air Drop (LVAD) and Low Altitude Parachute Extraction Systems (LAPES) capable versions of both basic cargo and dump models are being built to support air mobile units. All models except the van will be C-130 and C-141 aircraft transportable. Commonality of commercial components within the family is the FMTV's central theme which minimizes logistics support and operational cost. The program's Joint Service Operational Requirement (JSOR) document also requires complementary 2 1/2 ton and 5 ton tactical trailers incorporating off-road performance capability and cargo bed size common with the LMTV and MTV cargo trucks. The trucks incorporate a Caterpillar diesel engine; an Allison automatic transmission with integral transfer case; Rockwell all-wheel drive axles; Eaton Central Tire Inflation System (CTIS) and Michelin aggressive off-road tubeless radial tires.

The modified commercial Cab Over Engine (COE) tilt type three man cab is ergonometically designed with three point safety belt harness. Tactical off-road mobility is enhanced by using radial tires, CTIS, high ground clearance chassis with modified suspension and individually damped hub reduction axles to minimize personnel and cargo shock loads, allowing cross country terrain traversing at higher speeds. The integration of all subsystems into an FMTV provides performance exceeding current medium truck fleet capabilities at twice to three times the endurance and reliability levels. The FMTV will perform line haul, local haul, unit mobility, unit resupply and other required missions in combat, combat support and combat service support units. The FMTV will replace existing and aging M44 Series 2 1/2 ton trucks, M39 and M809 Series 5 ton trucks. FMTV will also provide a follow-on to the current M939/A2 Series 5 ton truck.

## 7. Program Highlights:

### a. Significant Historical Developments --

The Family of Medium Tactical Vehicles (FMTV) Program, Operational and Organizational Plan was approved in September 1984. The User Requirement Document (JSOR) was established on 1 May 1986, and subsequently, the Army Cost and Operational Effectiveness Analysis (COEA) justified the program initiation on 4 June 1987. The FMTV Army Systems Acquisition Review Council (ASARC) approval was obtained on 5 August 1987, with further program approval from the Defense Acquisition Board (DAB) on 23 May 1988. Congress approved FY88 prototype funding, and prototype contracts were awarded on 21 October 1988. The Army conducted a 2 1/2 T Truck Feasibility Study which validated the requirement for a 2 1/2 T truck variant. In July 1989, as a result of the 2 1/2 T Truck Study, the LMTV was restored in the first year of the production contract. The December 1988 SAR

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7a. Program Highlights (Cont'd):

represented a procurement program of 15 years. As a result of the Army approved Tactical Wheeled Vehicle Modernization Plan (TWVMP) report to Congress dated 12 April 1989, the December 1989 SAR reflected the current 30 year procurement program. An exception SAR was submitted for 31 March 1990 to report a Nunn-McCurdy breach, which resulted primarily from the change in procurement schedule as identified in the TWVMP. The Request For Proposal (RFP) responses were received from the three contractors on 7 December 1990. The Source Selection Board convened on 8 December 1990 to evaluate the proposals. As a result of budget reductions, the model mix was changed to maximize procurement dollars against requirements during the first five-year multiyear contract, with several high cost, low priority variants being deferred until the second five-year multiyear contract. Cost proposals from the three competing contractors were received in February 1991. A quarterly exception SAR was submitted in June 1991 due to Nunn-McCurdy unit cost breaches and schedule slips of more than six months. The FMTV ASARC IIIA milestone review was completed in September 1991, and granted approval to proceed to Low Rate Initial Production. The Secretary of Defense Certification for the June 1991 Nunn-McCurdy breaches was granted on 12 September 1991. The FMTV production contract was awarded to Stewart & Stevenson Services Inc. of Houston, TX on 11 October 1991. This was a five-year multiyear fixed price contract with an escalation clause which procures 10,843 trucks and includes option provisions. The new production facility is located in Sealy, TX. A revised Acquisition Program Baseline (APB) was approved by the Army Acquisition Executive on 29 January 1992. In March 1992, the FMTV program was selected by Congress as part of the "Mentor-Protege" program to develop Small and Disadvantaged Businesses as qualified subcontractors. The production facility in Sealy, TX was completed in December 1992. A sole-source R&D contract was awarded to Stewart & Stevenson on 30 September 1992 to build and test hardware, as well as develop the drawing package for the deferred fuel tanker, expandable van, and trailers. These models will be incorporated into the competitive FMTV rebuy solicitation scheduled for FY96. Production line start-up occurred in January 1993. Initial Production Test (IPT) and Initial Operating Test and Evaluation (IOT&E) were rescheduled which caused threshold breaches. A Program Deviation Report and a revised APB were submitted to the Army Acquisition Executive on 18 February 1993 and approved on 12 May 1993. On 25 June 1993 the FMTV Rollout ceremony was conducted at the contractor's Sealy, Texas production facility. The Mentor-Protege Agreement between Stewart & Stevenson and the Griffin Lamp Company was approved in July 1993 by the OSD Small and Disadvantaged Business Utilization Office.

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**7b. Program Highlights (Cont'd):**

**b. Significant Developments Since Last Report --**

This September Exception SAR is submitted due to schedule slips of 6 months or more. On 30 September 1994, the PM, FMTV identified that the schedule had breached the APB thresholds for IPT and IOT&E testing. The testing was temporarily terminated due to the soldiers being deployed to other Army missions. The Test Integration Working Group convened in October 1994 and determined the future structure of IOT&E. A new test plan has been established, and revised FMTV Program Baseline will be submitted as soon as additional contract call up dates are established. The ASARC IIIB is now delayed until August 1995.

The FMTV system is expected to satisfy mission requirements.

**c. Changes Since As Of Date --**

The schedule breach will have some cost impact, due to the change of testing schedule. The costs associated with testing are being determined at this time, and will be identified in detail in the Dec 94 SAR.

**8. Threshold Breaches:**

There are schedule breaches of six months or more to the approved Acquisition Program Baseline (APB) dated 12 May 1993. The cost impact of these breaches and/or other potential restructuring are being reviewed and will be included in future SARs. There are no Nunn-McCurdy unit cost breaches.

**9. Schedule:**

**a. Milestones --**

	Development Estimate	Approved Program	Current Estimate
Milestone I/II (ASARC)	AUG 87	MAY 87	MAY 87
Joint Service Operational Requirement (JSOR) Approval	NOV 87	N/A	NOV 87
DAB Program Review	N/A	MAY 88	MAY 88
Prototype Contract Awards	OCT 88	OCT 88	OCT 88
First Prototype Delivery	DEC 89	JAN 90	JAN 90
FSD Development Testing			
Start	DEC 89	JAN 90	JAN 90
Complete	OCT 90	DEC 90	DEC 90
Early User Test and Evaluation			
Start	MAY 90	MAY 90	MAY 90
Complete	OCT 90	OCT 90	OCT 90

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9a. Schedule (Cont'd):

Milestones (Cont'd) --	Development Estimate	Approved Program	Current Estimate
ASARC IIIA	JAN 91	SEP 91	SEP 91
Production Award (MYP)	JAN 91	OCT 91	OCT 91
Call up 2nd Year of MYP	N/A	AUG 92	AUG 92
Production Qualification Test (PQT)			
Start	N/A	MAY 92	JUL 92
Complete	N/A	NOV 92	DEC 92
First Production Delivery	MAR 92	MAY 93	APR 93
Initial Production Test (IPT)			
Start	MAR 92	MAY 93	JUN 93
Complete	OCT 92	FEB 94	JUN 95 (Ch-1)
IOT&E			
Start	N/A	SEP 93	MAR 95
Complete	N/A	MAR 94	MAY 95 (Ch-2)
Call Up 3rd Year of MYP Increment 1	N/A	JUN 93	SEP 93
ASARC IIIB	N/A	SEP 94	AUG 95 (Ch-2)
Call Up 3rd Year of MYP Increment 2	N/A	NOV 94	TBD (Ch-2)
First Unit Equipped (FUE)/Initial Operational Capability (IOC)-FMTV	DEC 92	OCT 94	JAN 96 (Ch-2)
Call up 4th Year of MYP	N/A	NOV 94	TBD (Ch-2)
Call Up 5th Year of MYP	N/A	NOV 95	TBD (Ch-2)
Production Decision Review Van, Tanker, & Trailer	N/A	JUN 96	JUN 96
PQT, Van & Tanker			
Start	N/A	NOV 97	NOV 97
Complete	N/A	DEC 97	DEC 97
IPT, Van & Tanker			
Start	N/A	FEB 98	FEB 98
Complete	N/A	OCT 98	OCT 98
IOT&E, Van & Tanker			
Start	N/A	APR 98	APR 98
Complete	N/A	AUG 98	AUG 98
PQT, Trailer			
Start	N/A	NOV 02	APR 98
Complete	N/A	DF 02	DEC 98
IPT Trailer			
Start	N/A	FEB 03	APR 98
Complete	N/A	OCT 03	DEC 98
IOT&E, Trailer			
Start	N/A	APR 03	AUG 98
Complete	N/A	AUG 03	DEC 98

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9b. Schedule (Cont'd):

b. Previous Change Explanations --

As a result of PL 101-189, 29 November 1989, "Low Rate Initial Production" (LRIP) the FMTV was restructured into a two-step decision for LRIP and Full Rate Production. Per OUSD(A) letter dated 9 February 1990, an ASARC review will replace the DAB for the FMTV program LRIP and Full Rate decisions. A joint FUE/IOC for FMTV was reestablished due to the validation of the 2 1/2 T (i.e. LMTV) variant. Reduced funding for the FMTV program required an amendment to the solicitation, which delayed most of the subsequent milestones by one to two months. The reduced funding resulted in restructuring of the model mix, and deletion of the separate model (Group A/Group B) designations. The call up for increment 2 of the 3rd year multiyear procurement (MYP) was established at 90 days following completion of IPT. Additional testing milestones were added to the APB for the 2nd MYP models (van, tanker, and trailer), which were moved to second and subsequent buys as a result of the funding reduction in the budget. The final ASARC IIIA milestone review was delayed until 10 June 1991, and all subsequent milestones were adjusted accordingly. PQT testing dates changed, and duration increased from a three months to seven months. The delay in ASARC IIIA from June 1991 to September 1991 caused delays in subsequent milestones. Due to changes in the FMTV funding profile for FY92, trailer production was delayed. The revised Acquisition Program Baseline dated 29 January 1992 reflected these changes. Completion of PQT was originally scheduled for November 1992 but was actually completed in December 1992. The contractor was unable to complete technical data in time for scheduled production, causing first production deliveries to slip from October 1992 to May 1993. The Operational Test Readiness Review (OTRR 2) decided that IOT&E should be delayed until at least 8000 miles of IPT have been run on these vehicles. This changed IPT start and complete from November 1992 and August 1993 to May 1993 and February 1994. IOT&E start and complete were also changed from June 1993 and November 1993 to September 1993 and March 1994. This delay caused the Milestone III decision, ASARC III to be delayed from March 1994 to September 1994. Subsequent multiyear procurement call-ups and testing dates were changed accordingly. Initial production delivery was changed from May 1993 to April 1993 due to accelerated production. However, delays in receipt of parts for other models impacted the delivery and testing schedule. IOT&E was suspended by OPTEC on 16 December 1993 due to hardware deficiencies, and testing dates were revised. Revised dates were developed for all subsequent milestones. The testing milestones for trailers also changed to reflect changes in funding profile. Complete revised milestones will be established at the Milestone IIIB decision.

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9c. Schedule (Cont'd):

c. Current Change Explanations --

(Ch-1) The Initial Production Test (IPT) was scheduled to be completed by the threshold of August 1994. Due to ongoing production problems which caused reliability failures, the completion of IPT has been delayed. The continued IPT testing is reverification of fixes to establish user confidence before going into Initial Operational Test and Evaluation (IOT&E). IPT Complete was October 1994 and is now June 1995.

(Ch-2) The Operational Test In Process Review (OT IPT) held by OPTEC on 4 August 1994 resulted in the decision to enter into IOT&E with FMTV on 15 August 1994. However, IOT&E has been temporarily terminated due to other Army requirements and reliability problems encountered during testing. The Test Integration Working Group convened in October 1994 and determines the future structure of IOT&E. A new test plan has been established and a revised FMTV Program Baseline will be submitted as soon as the contract call up dates are determined. IOT&E Start was September 1993 and will restart in March 1995. IOT&E Complete was September 1994 and is now May 1995. The ASARC IIIB was November 1994 and is now August 1995. First Unit Equipped (FUE)/Initial Operational Capability (IOC) was December 1994 and is now January 1996. The Call Up 3rd Year of MYP Increment 2 was September 1994 and is now TBD; Call Up 4th Year of MYP was November 1994 and is now TBD; Call Up 5th Year of MYP was November 1995 and is now TBD.

d. References --

Development Estimate:

DAE Program Baseline, Mar 1989; SDDM decision 7 Oct 1988.

Approved Program:

AAE Approved Acquisition Program Baseline dated 12 May 1993.

10. Performance Characteristics:

a. Performance --	DE	Approved Program		Demon- strated Perf	Current Estimate
		<u>Objective/Threshold</u>			
Highway Speed on 2% Grade at GVW (mph)	55	55	/ 55	54.8	55
Highway Speed on 3% Grade at GVW (mph)	45	45	/ 45	48.7	45
Highway Speed on 2% Grade at GCW (mph)	40	40	/ 40	45.5	40

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10a. Performance Characteristics (Cont'd):

	DE	Approved Program Objective/Threshold		Demon- strated Perf	Current Estimate
Highway Speed on 3% Grade at GCW (mph)	30	35	/ 30	35.8	35
LMTV Payload (tons)	2.5	2.5	/ 2.5	2.5	2.5
MTV Payload (tons)	5	5	/ 5	5	5
LMTV Towed Load (lbs)	7500	7500	/ 7500	7500	7500
MTV Towed Load (lbs)	20000	21000	/ 21000	21000	21000
Longitudinal Grade Operation (%)	60	60	/ 60	60	60
Slide Slope Operation (%)	30	30	/ 30	30	30
Fording Without Kit (inches)	30	30	/ 30	30	30
Fording With Kit (inches)	60	60	/ 60	60	60
Operating Range on Integral Fuel at GCW (miles)	300	300	/ 300	300	300
Reliability:					
MMBHMF (miles)					
Truck, Cargo (LMTV)	2140	3000	/ 2450	TBD	3000
Truck, Cargo (MTV)	1600	2700	/ 1950	TBD	2700
Tractor	3300	3300	/ 2600	TBD	3300
Wrecker	2300	2300	/ 2000	TBD	2300
Trailer (LMTV)	2800	2800	/ 1985	TBD	2800
Trailer (MTV)	2600	2600	/ 1600	TBD	2600
MMBOMF (miles)					
Truck, Cargo (LMTV)	1605	2228	/ 1832	TBD	2228
Truck, Cargo (MTV)	1200	2035	/ 1446	TBD	2035
Tractor	2500	2480	/ 1960	TBD	2480
Wrecker	1900	1875	/ 1500	TBD	1875
Trailer (LMTV)	2100	2056	/ 1489	TBD	2056
Trailer (MTV)	1900	1913	/ 1200	TBD	1913
MMHPOM					
Truck, Cargo (LMTV)	.011	0.01	/ 0.011	TBD	0.01
Truck, Cargo (MTV)	.012	0.011	/ 0.012	TBD	0.011
Tractor	.0135	0.012	/ 0.015	TBD	0.012
Wrecker	.017	0.015	/ 0.018	TBD	0.015
Trailer (LMTV)	.004	0.003	/ 0.005	TBD	0.003
Trailer (MTV)	.004	0.003	/ 0.005	TBD	0.003



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10a. Performance Characteristics (Cont'd):

	<u>DE</u>	<u>Approved Program Objective/Threshold</u>		<u>Demon- strated Perf</u>	<u>Current Estimate</u>
Transportability:					
Surface	H,S & R	H,S&R	/ H,S&R	TBD	H,S&R
Transportation (Highway, Ship & Rail)					
Air Transportation	C-141	C-141	/ C-141	TBD	C-141
Mobility: (vehicle cone index)					
Truck Cargo	25	25	/ 25	TBD	25
Truck & Trailer Combination	35	35	/ 35	TBD	35

MMBMMF - Mean Miles Between Hardware Mission Failure  
MMBOMF - Mean Miles Between Operational Mission Failure  
MMHPOM - Maintenance Man Hour/Operating Mile  
GVW - Gross Vehicle Weight  
GCW - Gross Combined Weight

Production vehicles have not yet been fully accepted and tested,  
therefore some demonstrated performance values are not yet available.  
Values listed are based on shakedown test for MTV trucks.

b. Previous Change Explanations --

Current Estimate values had been changed from development estimate  
values to production values as identified in the solicitation for the  
FMTV production contract. The Dec 91 SAR identified changes in  
specifications from the previous SAR, due to production values and  
contract specifications reflecting the FMTV program as of contract  
award, and supported in the Acquisition Program Baseline dated 29  
January 1992.

c. Current Change Explanations -- None.

d. References --

Development Estimate:

DAE Program Baseline, Mar 1989; SDDM decision 7 Oct 1988.

Approved Program:

AAE Approved Acquisition Program Baseline dated 12 May 1993.

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11. Total Program Cost and Quantity (Current Estimate in Millions of Dollars):

	Development <u>Estimate</u>	Approved <u>Program</u>	Current <u>Estimate</u>
a. Cost --			
Development (RDT&E)	57.9	164.8	175.7
Procurement	6567.4	10197.2	8296.9
Rollaway	(6089.0)		(8068.8)
Other Wpn Sys Cost	(239.3)		(214.6)
Peculiar Support	(0.0)		(0.0)
Initial Spares	(239.1)		(13.5)
Construction (MILCON)	0.0	0.0	0.0
Ops. and Maint. (O&M)	<u>0.0</u>	<u>N/A</u>	<u>0.0</u>
Total FY 89 Base-Year \$	6625.3	10362.0	8472.6
Escalation	1943.3	11292.2	7402.7
Development (RDT&E)	(2.0)	(65.4)	(63.0)
Procurement	(1941.3)	(11226.8)	(7339.7)
Construction (MILCON)	(0.0)	(0.0)	(0.0)
Ops. and Maint. (O&M)	<u>(0.0)</u>	<u>(N/A)</u>	<u>(0.0)</u>
Total Then-Year \$	8568.6	21654.2	15875.3
b. Quantity --			
Development (RDT&E)	0	0	0
Procurement	<u>118995</u>	<u>112322</u>	<u>87598</u>
Total	118995	112322	87598

Note: Excludes 147 RDTE prototypes from the SAR Baseline and 147 from the Current Estimate that are not considered fully configured.

The Current Estimate quantity includes trucks only; trailers have been included in the program under a single unit of measure (trucks).

c. Foreign Military Sales/International Cooperative Programs -- None.

d. Nuclear Costs -- None.

e. References --

Development Estimate:

DAE Program Baseline, Mar 1989; SDDM decision 7 Oct 1988.

Approved Program:

AAE Approved Acquisition Program Baseline dated 12 May 1993.

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12. Program Acquisition/Current Procurement Unit Cost Summary:

	<u>Current</u> <u>Estimate</u>	<u>Current Year</u> <u>UCR Baseline</u>	<u>Budget Year</u> <u>UCR Baseline</u>
a. Program Acquisition	(Sep 94 SAR)	(DEC 92 SAR)	(DEC 93 SAR)
(1) Cost (TY\$)	15875.3	17171.1	15874.8
(2) Quantity	87598	102050	87598
(3) Unit Cost	0.181	0.168	0.181
b. Current Procurement --	(FY 1994)	(FY 1994 APPN)	(FY 1995)
(1) Cost (TY\$)	21.8	21.8	382.7
Less CY Adv Proc	0.0	0.0	0.0
Plus PY Adv Proc	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Net Total	21.8	21.8	382.7
(2) Quantity	111	111	3535
(3) Unit Cost	0.196	0.196	0.108

The above quantity numbers include trucks only; trailers have been included in the program under a single unit of measure (trucks).

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13. Cost Variance Analysis:

a. Summary (Current (Then-Year) Dollars in Millions)

	RD&E	PROC	MILCON	TOTAL
Development Estimate	59.9	8508.7	0.0	8568.6
Previous Changes:				
Economic	-2.3	+176.6	-	+174.3
Quantity	+141.1	+637.8	-	+778.9
Schedule	-11.2	+1740.9	-	+1729.7
Engineering	-	-	-	-
Estimating	+51.2	+4763.0	-	+4814.2
Other	-	-	-	-
Support	-	-190.4	-	-190.4
Subtotal	+178.8	+7127.9	-	+7306.7
Current Changes:				
Economic	-	-	-	-
Quantity	-	-	-	-
Schedule	-	-	-	-
Engineering	-	-	-	-
Estimating	-	-	-	-
Other	-	-	-	-
Support	-	-	-	-
Subtotal	-	-	-	-
Total Changes	+178.8	+7127.9	-	+7306.7
Current Estimate	238.7	15636.6	-	15875.3

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13a. Cost Variance Analysis (Cont'd):

a. Summary (FY 1989 Constant (Base-Year) Dollars in Millions)

	RD&E	PROC	MILCON	TOTAL
Development Estimate	57.9	6567.4	0.0	6625.3
Previous Changes:				
Quantity	+83.6	-70.8	-	+12.8
Schedule	-	-321.7	-	-321.7
Engineering	-	-	-	-
Estimating	+34.2	+2372.3	-	+2406.5
Other	-	-	-	-
Support	-	-250.3	-	-250.3
Subtotal	+117.8	+1729.5	-	+1847.3
Current Changes:				
Quantity	-	-	-	-
Schedule	-	-	-	-
Engineering	-	-	-	-
Estimating	-	-	-	-
Other	-	-	-	-
Support	-	-	-	-
Subtotal	-	-	-	-
Total Changes	+117.8	+1729.5	-	+1847.3
Current Estimate	175.7	8296.9	-	8472.6

b. Previous Change Explanations --

RD&E

Economic: Revised escalation indices.  
 Quantity: Additional R&D quantities due to change from 15 to 30 year program.  
 Schedule: Synchronized future prototype phase with production schedule; shift of funding from FY98 & FY99 to FY00 & FY01 to align with President's Budget caused shortfall to optimum schedule. Correction to the Dec 92 SAR from schedule to estimating.  
 Estimating: Increase in cost of testing; revised testing and engineering costs; increase in estimate of prototype hardware; current and prior year inflation offset; additional testing for tankers,

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13b. Cost Variance Analysis (Cont'd):

vans and trailers. Revised estimate for FY00 and FY01.

Procurement

**Economic:** Revised escalation indices; economic adjustment for negative program change.

**Quantity:** Implementation of Tactical Wheeled Vehicle Modernization Plan (TWVMP) extended program from 15 to 30 years, and decrease in trailer quantity; revision of model mix IAW TWVMP. MTV trucks were reduced from 57447 to 41147 and LMTV trucks were increased from 44603 to 46451.

**Schedule:** Trucks rescheduled for purchase in later years and model mix changes; change in average truck and trailer cost due to change in schedule; adjustments incorporated from the contract award; change in procurement buy profile for MTV and LMTV trucks and LMTV trailers.

**Estimating:** Reduction of excess warranty costs and change from conventional to level pricing on total rollaway cost; additional testing requirements; increased estimate based on M939A2 award; current and prior year inflation offset; adjustments for actual contract prices; additional cost for testing included in contract award; adjustment for changes in model mix.

**Support:** Support, testing and additional contracts, System Technical Support, Federal Retail Excise Tax (FRET) and additional spares due to extended program; total Package Fielding/First Destination Transportation (TPF/FDT) added per Congressional ruling; adjustments in FRET due to change in model mix; update initial spares to align with President's Budget and reduction of wholesale requirements; PM salaries transferred from OMA Appn; increase in PM salaries; adjustments in TPF/FDT due to revised fielding plan; change in variants requiring FRET; added OCONUS/CONUS tech support and NET; current & prior year inflation offset; reduced initial spares, other weapon system costs and PM salaries due to qty reduction and model mix change.

c. Current Change Explanations -- None.

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14. Program Acquisition Unit Cost (PAUC) History (Then-Year Dollars in Millions):

Current SAR Baseline to Current Estimate --

PAUC (Initial Est)	Changes								PAUC (Current Est)
	Econ	Qty	Sch	Eng	Est	Other	Spt	Total	
0.072	0.002	0.034	0.020	--	0.055	--	-0.002	0.109	0.181

15. Contract Information (Then-Year Dollars in Millions):

a. Procurement --

FMTV:		Initial Contract Price		
		Target	Ceiling	Qty
Stewart & Stevenson Serv., Houston, TX		\$1196.2	N/A	10843
DAAE07-92-C-R001, FFP/EPA				
Award: October 11, 1991				
Definitized: October 11, 1991				

Current Contract Price			Estimated Price At Completion	
Target	Ceiling	Qty	Contractor	Program Manager
\$1196.2	N/A	10843	\$1196.2	\$1196.2

Explanation of Change:

Cost and Schedule variance reporting is not required on this FFP contract.

16. Program Funding Summary (Current Estimate in Millions of Dollars):

a. Program Status --

- (1) Percent Program Completed: 20.6% (7 yrs/34 yrs)
- (2) Percent Program Cost Appropriated: 3.9% (\$617.8 / \$15875.3)

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16b. Program Funding Summary (Cont'd):

b. Appropriation Summary (Then-Year Dollars in Millions)

<u>Appropriation</u>	<u>Prior Years (FY88-93)</u>	<u>Budget Year (FY94)</u>	<u>Budget Year (FY95)</u>	<u>Balance To Complete (FY96-2021)</u>	<u>Total</u>
RDT&E	78.2	3.7	6.6	150.2	238.7
Procurement	514.1	21.8	382.7	14718.0	15636.6
MILCON	-	-	-	-	-
O&M	-	-	-	-	-
Total	592.3	25.5	389.3	14868.2	15875.3

c. Annual Summary --

Fiscal Year	Qty	Flyaway FY89 Dollars		Total Base Year\$	Total Then-Year \$			Encl Rate (%)
		Nonrec	Rec		Program	Obl- gated	Ex- pended	

Appropriation: 2040 Research, Development, Test + Eval, Army

1988				9.9	9.8	9.8	9.8	3.0
1989				26.3	27.0	26.9	25.3	4.2
1990				18.0	19.2	19.2	19.1	4.1
1991				9.5	10.6	10.6	4.5	4.3
1992				9.5	10.9	10.8	3.9	3.0
1993				0.6	0.7	0.7	0.4	2.7
1994				3.1	3.7			2.5
1995				5.3	6.6			2.8
1996				1.4	1.8			2.9

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16c. Program Funding Summary (Cont'd):

Fiscal Year	Qty	Flyaway FY89 Dollars		Total Base Year\$	Total Then-Year \$			Excl Rate (%)
		Nonrec	Rec		Program	Oblig- ated	Ex- pended	

Appropriation: 2040 Research, Development, Test + Eval, Army (Cont'd)

1997				1.4	1.8			3.0
1998				1.3	1.8			3.0
1999				1.3	1.8			3.0
2000				1.4	2.0			3.0
2001				56.9	84.3			3.0
2002								3.0
2003								3.0
2004								3.0
2005								3.0
2006								3.0
2007								3.0
2008								3.0
2009				15.2	28.5			3.0
2010				14.6	28.2			3.0
Subtot				175.7	238.7	78.0	63.0	

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16c. Program Funding Summary (Cont'd):

Fiscal Year	Qty	Flyaway FY89 Dollars		Total Base Year\$	Total Then-Year \$			Escl Rate (%)
		Nonrec	Rec		Program	Oblig- ated	Ex- pended	

Appropriation: 2035 Other Procurement, Army

1991	394	15.6	40.8	68.5	78.6	78.6	42.3	4.3
1992	1307	7.3	126.1	153.0	180.4	174.8	71.4	3.0
1993	2060	9.7	200.5	210.6	255.1	166.3	2.5	2.7
1994	111	1.5	13.7	17.6	21.8	1.1		2.5
1995	3535	1.8	291.5	298.4	382.7			2.8
1996	3524	1.8	280.5	289.8	382.8			2.9
1997	2037	16.9	205.5	227.5	309.5			3.0
1998	1799	2.2	187.7	196.3	275.1			3.0
1999	2627	2.0	267.5	275.5	397.6			3.0
2000	3555	1.9	323.4	331.3	492.5			3.0
2001	2906	9.6	255.3	267.5	409.5			3.0
2002	2424	15.3	215.0	233.6	368.4			3.0
2003	3636	1.7	324.5	338.4	549.7			3.0
2004	3636	1.7	324.8	340.4	569.5			3.0
2005	3636	1.7	325.0	332.9	573.7			3.0
2006	3636	9.6	320.4	332.3	589.8			3.0
2007	2424	15.3	216.3	234.1	428.0			3.0
2008	3636	1.7	325.7	339.1	638.6			3.0

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16c. Program Funding Summary (Cont'd):

Fiscal Year	Qty	Flyaway FY89 Dollars		Total Base Year\$	Total Then-Year \$			Escl Rate (%)
		Nonrec	Rec		Program	Oblig- ated	Ex- pended	

Appropriation: 2035 Other Procurement, Army (Cont'd)

2009	3636	1.7	325.9	341.0	661.3			3.0
2010	3636	1.7	326.1	333.8	666.8			3.0
2011	3636	9.6	321.6	333.1	685.4			3.0
2012	2424	15.3	217.4	234.5	497.0			3.0
2013	3636	1.7	326.8	339.6	741.4			3.0
2014	3636	1.7	326.9	341.4	767.6			3.0
2015	3636	1.7	327.1	334.5	774.6			3.0
2016	3636	9.6	322.5	333.8	796.3			3.0
2017	2424	15.3	209.7	234.8	576.9			3.0
2018	3472	1.7	312.9	325.3	823.2			3.0
2019	3472	1.7	313.0	326.9	852.2			3.0
2020	3471	2.4	313.3	320.3	860.0			3.0
2021				11.1	30.6			3.0
Subtot	87598	181.4	7887.4	8296.9	15636.6	420.8	116.2	
Grand Total	87598	181.4	7887.4	8472.6	15875.3	498.8	179.2	

Expenditures and obligations reflect program office records as of January 31, 1994.

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17. Production Rate Data:

a. Production Baseline Rate - None.

b. Cost and Quantity Variances (Then Year Dollars in Millions)

	Minimum Sustaining	Current Estimate	Maximum Economic	Min Sustain less CE	Maximum less CE
FY 1994					
Procurement Cost	0.0	21.8	0.0	-21.8	-21.8
Procurement Qty		111		N/A	N/A
Proc. Unit Cost	N/A	0.196	N/A	N/A	N/A
FY 1995					
Procurement Cost	0.0	382.7	0.0	-382.7	-382.7
Procurement Qty		3535		N/A	N/A
Proc. Unit Cost	N/A	0.108	N/A	N/A	N/A
Balance of Proc. (FY 1996 to Complete)	0.0	14718.0	0.0	-14718.0	-14718.0

c. Deliveries (Plan/Actual) --

RDT&E  
Procurement

To Date  
60/60  
0/0

d. Approved Design-to-Cost Objective -- N/A.

18. Operating and Support Costs:

a. Assumptions and Ground Rules --

The average miles/vehicle/year for the LMTV truck is 3,324 miles; the MTV truck is 6,006 miles; the LMTV trailer is 1,725 miles; the MTV trailer is 3,000 miles. The average years of operation (useful life) is 20 years. The dedicated crew/vehicle/year for LMTV trucks is .1 annual manyears per vehicle; for MTV trucks is .25 annual manyears per vehicle. Dedicated crew is not applicable for trailers. The current Baseline Cost Estimate dated April 1991 was used to develop the costs in section 18 b.

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18b. Operating and Support Costs (Cont'd):

b. Costs -- (FY 1989 Constant (Base-Year) Dollars in Thousands)

Cost Element	Avg Annual Cost Per LMTV	Ave Annual Cost Per MTV
Personnel	3.9	6.9
O&S Consumables	3.2	7.7
Direct Depot Maint	0.0	0.1
Sustaining Investment	0.1	0.1
Other Direct Costs	0.0	0.1
Indirect Costs	1.5	2.9
Total	8.7	17.8

18b. Costs -- (FY 1989 Constant (Base-Year) Dollars in Thousands)

Cost Element	Avg Annual Cost LMTV Trailer	Avg Annual Cost MTV Trailer
Personnel	1.10	1.23
O&S Consumables	0.18	0.37
Direct Depot Maint	0.00	0.00
Sustaining Investment	0.01	0.01
Other Direct Costs	0.00	0.00
Indirect Costs	0.34	0.38
Total	1.63	1.99

c. Contractor Support Costs -- (Current (Then-Year) Dollars in Millions)

Funding	FY1993 & Prior	FY1994	FY1995	Balance To Complete	Total
Other	0.5	---	---	---	0.5
Total	0.5	---	---	---	0.5

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